

terminated. The hunt will have to be kept up, else it will soon become as abundant as ever.

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DESCRIPTIONS OF NEW JAPANESE LAND SHELLS.

BY H. A. PILSBRY AND Y. HIRASE.

Chloritis tosannus n. sp.

Shell umbilicate, depressed, the spire but slightly convex, very thin, uniform brown. Surface slightly glossy, closely set with short hairs arranged in regular oblique rows. Whorls $4\frac{3}{4}$, very convex, separated by a deeply excavated suture, the last whorl rounded peripherally and beneath. Aperture slightly oblique, rounded-lunate; peristome thin, acute and not expanded except at the columellar insertion, where it is widely dilated, partly covering the umbilicus. Alt. 10, diam. 17.5 mm.

Shinjo-mura, Tosa. Type no. 84415. A. N. S. P., from no. 1015 of Mr. Hirase's collection.

This species is the first *Chloritis* found in Shikoku. It is very like *C. perpunctatus*, but about twice the size. In *C. fragilis* the hairs are much more widely spaced. *C. hirasei* is far more widely umbilicate.

Eulota (Cælorus) cavitectum n. sp.

The shell resembles *E. cariconus*, but is larger, not quite so high, the umbilicus contracting more rapidly within. Brown; covered with oblique cuticular threads and small scales, the scales predominating on the last whorl and base. Whorls $6\frac{1}{3}$, slightly convex, the last strongly carinate at the periphery, a little convex beneath, descending rather deeply below the keel in front. The aperture is nearly horizontal, transversely oval. The peristome is brown, thin, the upper margin not expanded, lower margin reflexed, bearing a white tubercle on the inner margin. Alt. 5, diam. 10 mm.

Kochi, Tosa. Type no. 84416. A. N. S. P., from no. 1033 of Mr. Hirase's collection.

E. cariconus of western Kyushu is smaller, has more whorls, a well-like umbilicus, and finer sculpture, the cuticle of *E. cavitectum*

being roughened like that of a *Plectotropis*. It is the first *Cœlorus* found in Shikoku Island.

Trishoplita lischkeana var. *hizenensis* n. var.

The shell is transparent-whitish, with a red-brown band at the periphery, which is angular in front, becoming rounded on the latter part. The band ascends above the suture. The surface is glossy, and under the lens is seen to be very finely striate, and decussate by very close, fine, shallow spiral striæ. Whorls $4\frac{1}{2}$. The umbilicus is about one-eighth the diameter of the shell. Peristome thin, expanded below, hardly so above.

Alt. 5.8, diam. 9 mm.

Alt. 5.3, diam. 8.8 mm.

Ukujima, Hizen. Types no. 84414. A. N. S. P., from no. 1019 of Mr. Hirase's collection.

This little shell has the red-brown band and decussate surface of the much larger shell I described as *T. collinsoni* var. *okinoshimæ* (Proc. Acad. Nat. Sci., Phila., 1901, p. 547. It is also related to *T. c.* var. *casta* (NAUTILUS XV, 'p. 19), also a larger shell, from the province Iiuga, in eastern Kyushu; and to *T. lischkeana* (Kobelt), from Hagi, Nagato, on the northwestern coast of southwestern Hondo (Nippon). *T. lischkeana* is more elevated than *hizenensis*, and though compressed, the last whorl is not angular. Otherwise the two forms seem to be alike, so far as we can tell from the published description and figures of *lischkeana*.

One of the present authors, in referring these forms to *A. Adams collinsoni* some years ago (NAUT. XV, 19), was influenced by the belief that the locality "Tago" given for that species was situated in western Shikoku but this was an error, Tago being a seaport of the province Izu, on Suruga Gulf; and as *collinsoni* is described as a decidedly more globose shell than *casta*, etc., though similarly colored, it will probably prove to be specifically distinct from the forms *casta* and *okinoshimæ*.

Trishoplita mesogonia var. *shikokuensis* n. var.

The shell is similar in form to *T. mesogonia* (Pils.), but differs in sculpture, being very closely and finely striate spirally. The types are red-brown, fading towards the suture and base, with a pale line at the angular periphery, and more or less streaked with whitish-corneous. Whorls $5\frac{1}{2}$. Alt. 7.3, diam. 11 mm.

Sodayama, Tosa. Types no. 84412. A. N. S. P., from no. 1016 of Mr. Hirase's collection.

T. mesogonia is from the province Tango in western Hondo, Hilizan on the western side of Lake Biwa, etc. It varies from reddish-brown to nearly as pale as *T. goodwini*. The variety from Shikoku is similar in shape, but constantly different in sculpture. The types are variegated as described above. A series from Kochi, Tosa (Mr. Hirase's no. 580), has neither the pale peripheral band nor the streaks of the shells from Sodayama, and varies from pale brown to nearly as light a tint as *T. goodwini*. Specimens of this lot were compared by Mr. Gude with his *T. goodwini* var. *carinata*, and said to "differ in the body-whorl, and the aperture is smaller and more rounded." Others were found at Suimura, Awa (Shikoku), Mr. Hirase's no. 823, like the Kochi lot.

Arinia japonica n. sp.

The shell is very minute, gray, cylindric, terminating above in an *extremely short, low brownish cone* of hardly two whorls. Surface lusterless, sculptured with narrow ribs, like a *Diplommatina*. These ribs are fine and rather close, but on the last whorl they become *very widely spaced*. Whorls $5\frac{1}{3}$, convex, the last whorl distorted, being smaller than the preceding whorl, and strongly ascending in front. It is very shortly and inconspicuously rimate. The aperture is vertical and circular. The peristome is continuous, very narrowly expanded, and thickened outside behind the edge. The columella is simply concave. Length 2. diam. 1.2 mm.

Goto, Hizen. Types no. 84413. A. N. S. P., from no. 1018 of Mr. Hirase's collection.

This tiny snail is the first *Arinia* from Japan, and by far the most northern of its kind. It is remarkable for the very obtuse summit.

ILLUSTRATIONS OF SOME JAPANESE LAND SHELLS.

Several of the Japanese snails described in the NAUTILUS during the past year or two are illustrated on the plate accompanying Mr. Hirase's catalogue of Japanese shells inserted in our advertising pages this month. As some of them have not before been figured, it seems proper briefly to refer to them.